

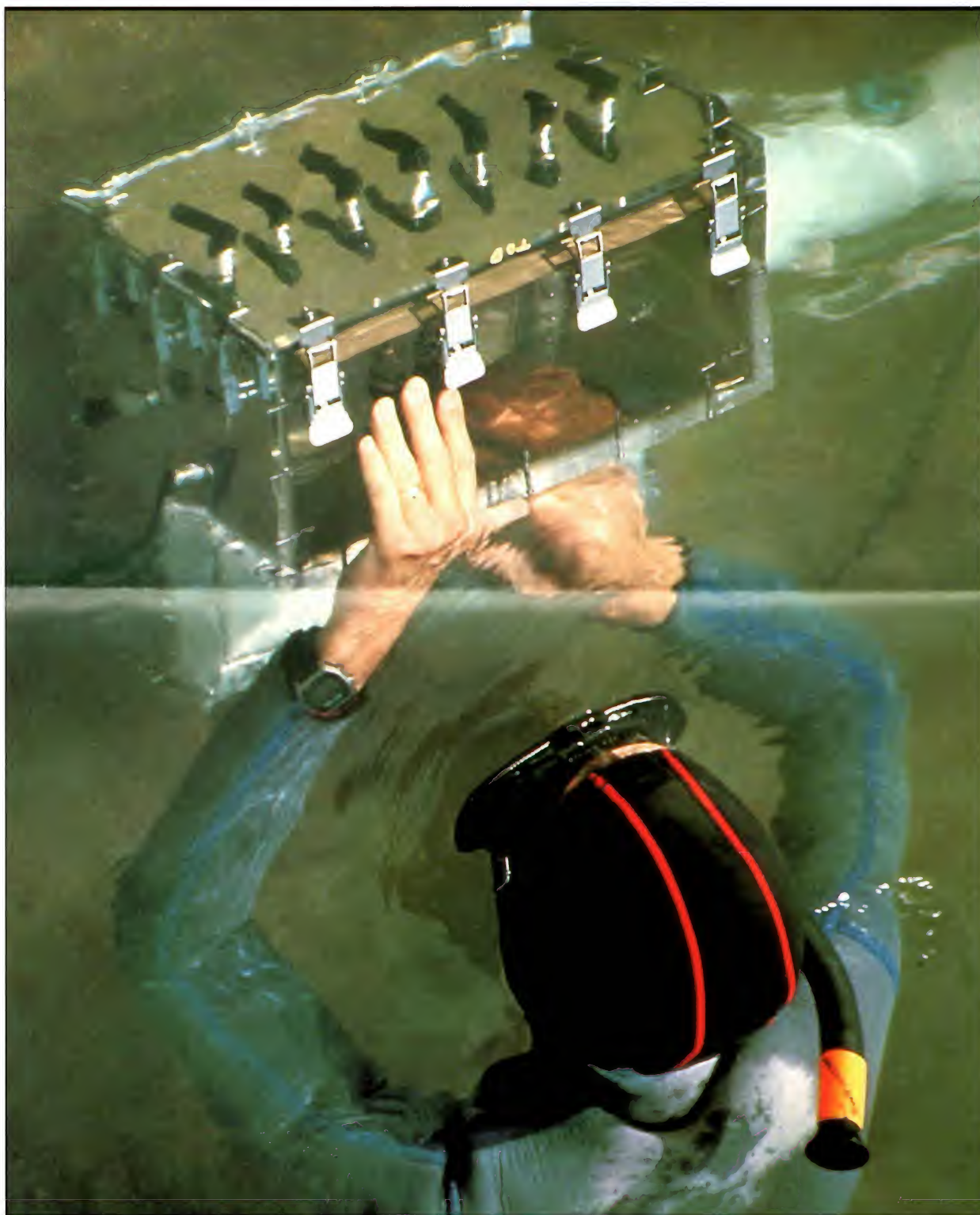
Inside & Out

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COMPAQ NEWS

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FISHY RESEARCH PROJECT



Safe in its Plexiglass housing, this COMPAQ SLT/286 played an integral role in a research project that focused on the mating rituals of stingrays. For more information, see article on page 3.

No employee action needed

Company two-for-one stock split announced

The Compaq Board of Directors voted last month to effect a two-for-one stock split by declaring a 100 percent Compaq stock dividend.

The company will distribute to its stockholders certificates representing one additional share of common stock for each share of common stock owned.

Employee stock options will be adjusted to reflect the stock split. The number of shares that each employee has the right to acquire under the plan will double and the exercise price will halve. If an employee has the right to acquire 50 shares for \$100, after June 29 that employee would have the right to acquire 100 shares for \$50.

No action is needed by Compaq shareholders or option holders. Stock held through the investment plan will also automatically double after June 29.

The company stock price will be approximately half of its former level after the split takes effect on June 29.



As a part of the company's emphasis on environmental responsibility, all future issues of *Inside & Out* will be printed on recycled paper.

Compaq now offers networking PCs

Two new personal computers with specific built-in features for network use are now available to Compaq customers. These new products — the COMPAQ DESKPRO 286N and the COMPAQ DESKPRO 386N — are ideally suited for both connected and stand-alone PC applications.

They began shipping to Authorized Dealers in May.

Both computers address the growing demand for networked PCs that allow PC users to share files, peripherals and other computer resources across a network.

The COMPAQ DESKPRO 386N Personal Computer is based on the high-performance 16-MHz 386SX microprocessor, and the COMPAQ DESKPRO 286N Personal Computer is

based on the 12-MHz 286 microprocessor. Both systems come standard with one megabyte of memory and offer three model configurations.

The COMPAQ DESKPRO 386N and the COMPAQ DESKPRO 286N can be networked with the COMPAQ SYSTEMPRO and COMPAQ DESKPRO products used as servers to provide a high-performance, PC networking solution to file sharing,

database management, electronic mail, order entry and other PC-based local area network applications.

"Business users in the 1990s need both PC functionality and network access from their computers," said Mike Swavely, President, Compaq North America.

"The COMPAQ DESKPRO 386N and the COMPAQ DESKPRO 286N deliver per-

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Program aims for safer equipment

A program is now in place at Compaq which will help ensure that all equipment and chemicals used in the company are safe and environmentally responsible.

The Equipment and Chemical Review Program was implemented at the first of the year. It calls for all prospective new chemicals and equipment — such as manufacturing and maintenance equipment but excluding office equipment such as typewriters — to undergo a review process before being purchased by Compaq.

"We're taking a look at the chemical or equipment itself and how it measures up to our safety, health and environmental standards. We also look at how it will be used within the company," says Kevin Farnam, Corporate Environmental Engineer. He adds that a number of other large corporations have a similar review process.

Site Loss Prevention Representatives administer the program. Whenever someone wants to order a new chemical or piece of equipment, a detailed review form must be completed by the requester. "Those requesting new chemicals or equipment must have done their homework," Farnam says.

Cynthia Treckman-Sipes, Senior Loss Prevention Engineer, administers the program in PCB operations. She says it will take teamwork to get the program running smoothly.

"We will be ordering a lot of equip-

ment in the future. Some of it is new to the industry. Some is even prototype equipment," she explains. "If the equipment is not tried and true, it takes more effort and knowledge to review it."

Farnam adds that Compaq is constantly evaluating new chemicals in search of alternatives which are either safer for employee health and the environment or produce less waste. "Anytime we deal with a new chemical for a new application, we must make sure we've considered all aspects of it," he says.

Besides ensuring that Compaq equipment and chemicals are safe and environmentally sound, the program also encourages employees to think about those issues.

"It allows us to ask questions up front," Farnam says. "The program is not geared to deny employees certain equipment or chemicals. It just lets them know that certain precautions must be taken when dealing with them."

Once a piece of equipment or chemical has been approved, it does not have to go through the review process again unless it is going to be used for a different application.

"It's a very proactive program," Treckman-Sipes says. "It's not intended to slow down the process. It can actually save time and money because we won't have to retrofit any equipment once we've bought it. Mainly, we won't be subjecting our employees to equipment that is unsafe."

Hazard communication makes the workplace safer

This is the second in a series of articles contributed to Inside & Out by the Corporate Loss Prevention Department at Compaq. These articles are intended to remind all employees of the importance of safety precautions on the worksite and at home.

Gas in your car, chlorine in the pool, fertilizer, oven cleaner.

Chemicals are part of the modern world and a necessary part of many work environments. In recognition of this fact, Compaq has developed a Hazard Communication (HAZCOM) program designed to help all employees better understand the chemicals they are likely to encounter.

It is the company's policy to minimize its employees' exposure to potentially hazardous materials in the workplace. To accomplish this, everyone needs to be aware of alternative materials, engineering controls in place and documentation of chemical substances.

Although information about potential chemical hazards has always been available, Compaq is using the HAZCOM program to ensure that all personnel are familiar with the facts about possible dangers in the workplace. Employees can take full advantage of the program by knowing more about each of its parts.

Hazard evaluation

All chemical manufacturers must review scientific studies and provide an updated warning label and Material Safety Data Sheets (MSDS) for each hazardous chemical they produce. Compaq constantly updates this information in the workplace.

Each warning label lists the chemical name, hazardous ingredients, hazard warnings and the chemical manufacturer's name and address. All containers must be properly labeled.

Each MSDS provides more detailed health and safety information, along with precautions for handling, protective measures and emergency first aid procedures. The MSDS forms for all hazardous chemicals you may handle are available in each work area.

Training programs

HAZCOM teaches employees how to handle chemicals safely and how to properly use personal protective equipment when necessary. An explanation of warning labels and information on how to use MSDS forms is also covered in this training.

Each individual's actions affect the safety of the work environment. To ensure the safety of the Compaq work environment, it's imperative that all employees be aware of any potential hazards in their area and how to deal with them. To use the Hazard Communication Program, employees should contact their supervisors.

SINGAPORE MOVES



Compaq Asia employees pitched in to help the company make its move to new quarters in Yishun last month.

Compaq offers QuickFind CD-ROM Support Reference Library to end-users

With COMPAQ QuickFind, a state-of-the-art support tool, COMPAQ PC buyers will have immediate access to in-depth information about the company's products without having to waste valuable time hunting through reference manuals.

COMPAQ QuickFind, a compact disc read-only memory (CD-ROM) support reference library, was recently made available to customers through Authorized COMPAQ Computer Dealers. Packed with more than 15,000 pages of published documentation on all COMPAQ products, QuickFind is one of the first products to incorporate technical information for one manufacturer's product line in a single resource.

It contains information on current and discontinued COMPAQ personal computers, application notes, technical updates, technical reference guides, product bulletins, memory upgrade charts and quick reference guides. More than 2,000 illustrations complement the text and make it easier for users to communicate with Authorized Dealers on service and technical issues.

Annual subscription fees for COMPAQ QuickFind include the initial CD-ROM along with the tutorial, User's Guide and quarterly updates of the database on CD-ROM from dealers.

"COMPAQ QuickFind will be especially valuable to companies with large installations of COMPAQ computers," said Ross Cooley, Vice President of Sales and Service at Compaq. "It enables a company's PC support manager, in conjunction with an Authorized Dealer, to better serve and support the company's COMPAQ PC users."

The COMPAQ QuickFind CD-ROM will run on any COMPAQ or industry-standard personal computer interfaced with a CD-ROM drive supported by a Microsoft device driver. It is compatible with the leading PC-based local area network (LAN) operating systems so users can share the information throughout a computer network.

QuickFind has a powerful search and retrieval capability that offers its users fast access to all documents on any given subject simply by entering a word, phrase or category. So, instead of spending hours looking through hard-copy documentation, users can search through QuickFind and be done in a few minutes.

The basic CD-ROM retrieval software for QuickFind was developed by Quantum Access Inc. of Houston and has been licensed by Compaq for the COMPAQ QuickFind Support Reference Library.

It's no fluke!

Compaq fosters fishy research project

Compaq receives many unusual requests for the loan of its products — from mountain climbers who want to organize an expedition to Mount Everest to the student who wants to type a term paper. However, the request that came late last year from a California-based film production company was particularly unconventional.

The letter asked for the loan of two COMPAQ PCs — the COMPAQ SLT/286 and the COMPAQ LTE/286 — to help record, quantify, study and play back information on the electrical fields emitted by stingrays during their mating rituals.

As provocative as these details sounded, in fact, the actual research was quite scholarly, as befits a film being produced for broadcast by the National Geographic Society and the British Broadcasting System (BBC).

In mid-February, a team from National Geographic accompanied Dr. Tim Tricas, PhD, a Research Associate at Washington University School of Medicine in St. Louis, Mo., to a remote, uninhabited bay on the Pacific coast of Mexico. Armed with specially equipped COMPAQ PCs, Tricas and his assistant, Scott Michaels of the University of Nebraska, conducted a series of experiments to document ways in which stingrays (members of the elasmobranch family to which sharks belong) use their sophisticated electro-reception systems to detect the faint electrical fields given off by other stingrays.

Sharks, skates and stingrays can detect extremely weak electric fields, including those of bioelectric origin — such as those passively emanating from their prey. Electric sensitivity in a moving shark can provide almost instantaneous information about the direction and strength of the source.

Tricas, a neurobiologist and expert in the behavior and ecology of sharks, rays and other Coral Reef aquatic life, specifically studies the neurobiology of fishes. He is particularly interested in the function of the vestibular inner ear of fishes, because the electrosensory system of sharks is closely associated with receptor systems of the human inner ear and performs a function similar to the processing of information by the human brain.

Buried treasure

The bioelectric sensitivity of the stingray is particularly useful during mating season, when females form large mounds in the sandy bottom of the inshore waters in the northern Gulf of California. Because some female stingrays are completely concealed, the males must use electrical fields emitted by female stingrays in order to locate them.

Tricas used the COMPAQ equipment to digitize the wave forms emitted by the female rays and to analyze the direct and modulated current components of those wave forms. He then synthesized these patterns and transmitted them through buried electrodes to stingrays, to see if the males would orient themselves toward the source of these electric waves.

A special Plexiglass housing was built for the COMPAQ SLT/286, enabling the personal computer to operate under water. For the 10 days of the experiment, recordings were made, analyzed, tested and then replayed.

"We documented or observed more than 65 orientations by stingrays to the buried electrodes — 60 of them by active males," says Tricas. "These males displayed a clear attraction toward the field emitted by the electrodes. Males cruising through the area would come within one meter of the electrodes, turn on a dime toward the source and stop directly above the buried electrode."

"We discovered that the males would orient toward electric fields of less than one microvolt per centimeter in strength," he notes. "In some cases, the males in the experimental area would dig up a female who was non-receptive (meaning she wasn't interested in mating or had already mated). She would slap the male with the spine on her tail until the male understood that she wasn't interested. In five cases, females sensing the electrical field buried themselves right next to the electrode."

"The COMPAQ SLT that went underwater worked fine," says Tricas. "In fact, we're still studying the data on the COMPAQ SLT back at the University and have been delighted to find how excellent and extremely fast the DMA is for a 12 MHz 286 machine."



These stingrays had no idea their actions were being tracked and recorded on a COMPAQ SLT/286 and COMPAQ LTE/286.

Beyond wildest expectations

"I've never, in over 20 years of shark research, had a more exciting project going," says Tricas. "Sharks and rays are generally secretive and private, so observing them in any sort of mating or reproductive activity is highly unusual. This wild population of stingrays revealed secrets about their behavioral use of bioelectric sensitivity far beyond my wildest expectations. So much information came from this trip that we could probably spend another 10 years on research of this one population."

"The technical support I received from the Compaq Engineering section was unbelievably helpful," Tricas adds. "This project couldn't have come off without these people, particularly in the short period of time with which we had to work."

Producer Mike DeGruy of The Film Crew, the company that filmed the pro-

ject, agrees. "Our sequence in Mexico illustrates experimentally and scientifically the amazing abilities of stingrays to use their electro-reception abilities to locate females to mate with. This is a complicated point to illustrate and, quite frankly, we would not have been able to do it without COMPAQ equipment."

The results of this experiment will be documented in a scientific paper being prepared by Tricas, and in a National Geographic television special, one of four that air each year on Public Television in the U.S. Because the film was co-produced by the BBC, it will air on the British network series "The Natural World," and will then be distributed around the world by the BBC's distribution wing in London. In addition, National Geographic will release this film on the home video market, ensuring a huge potential market for this subject — and for COMPAQ personal computers.

New distribution plans for LAN Manager unveiled

Compaq and Microsoft Corp. announced in late April that Microsoft will supply Microsoft LAN Manager to computer resellers, including selected Compaq Authorized Dealers.

Both companies will continue to work together in a broad range of joint marketing, support, training and development activities. Under the company's new Network Specialist Program, Microsoft will become a primary pro-

vider of networking software products to computer resellers.

Compaq and Microsoft worked together to develop full support of LAN Manager 2.0 for COMPAQ 386- and 486-based PCs. LAN Manager takes advantage of COMPAQ SYSTEMPRO multiple processors, intelligent disk drive arrays, and 32-bit network interface controllers, eliminating the need for Compaq to distribute its previously

announced version of COMPAQ LAN MANAGER 386/486.

"Our original strategy in remarketing LAN Manager was to ensure that a high-performance version of this operating system was available for COMPAQ networking products in our channel of distribution," said Mike Swavely, Compaq President, North America. "Microsoft's new Network Specialist Program, combined with the new

LAN Manager product, provides the same solution. We will continue to work with Microsoft on LAN Manager development to ensure that future versions fully support COMPAQ products and meet the needs of our customers. This co-development will allow us to optimize our products to take advantage of the new features and performance of LAN Manager and to better support our customers."

Compaq offers networking PCs

continued from page 1

formance, reliability and Compaq quality to serve the needs of these users in either connected or traditional PC environments."

The two new PCs offer full PC functionality, making them ideal, affordable systems for stand-alone applications. Both systems operate quietly and feature a new sleek, compact design. They are just 15 inches wide, 3.9 inches high and 14.9 inches deep, allowing them to fit easily on a desktop or credenza. A dual-speed fan is incorporated to provide system cooling and achieve the quietest possible operation.

In addition, the COMPAQ DESKPRO 386_N and the COMPAQ DESKPRO 286_N offer specific built-in features for networked-PC environments, including multi-level security controls and configuration flexibility.

The COMPAQ DESKPRO 386_N — delivering power and functionality for demanding business applications — processes information up to 60 percent faster than 10-MHz 286-based PCs.

The COMPAQ DESKPRO 286_N is ideal for word processing, spreadsheets, database management and other traditional business applications. It processes infor-

mation up to 25 percent faster than other PCs based on the 10-MHz 286 microprocessor.

The new PCs are offered in three model configurations: the Model 40, which includes a 40-megabyte fixed disk drive and a 3 1/2 inch 1.44 megabyte

diskette drive; the Model 1, which includes a 3 1/2 inch 1.44 megabyte diskette drive; and the diskless Model 0, which includes no fixed disk or diskette drive.

The COMPAQ DESKPRO 386_N is equipped with one megabyte of memory, expandable to 16 megabytes using the

standard high-speed memory expansion slot. The COMPAQ DESKPRO 286_N includes one megabyte of memory, expandable to 13 megabytes also using the high-speed memory expansion slot. Both systems offer a total of three slots — two 8/16-bit industry standard slots and a dedicated high-speed memory expansion slot — allowing users to customize and expand the systems according to changing requirements.

They also feature an integrated 16-bit Video Graphics Controller (VGA) which supports 132-column text mode. Other standard features include: integrated parallel, serial, pointing device (mouse) and keyboard interfaces; ROM-resident multilingual SETUP utility; security features on three levels — software controlled, hardware controlled and mechanical; and 90-watt power supply with automatic line switching.

The two new systems support leading network operating systems such as Novell NetWare and Microsoft LAN Manager, and network interface cards such as Ethernet, Token Ring and Arcnet. They are compatible with the thousands of hardware and software products available for industry-standard PCs.



The COMPAQ DESKPRO 286_N and COMPAQ DESKPRO 386_N were recently introduced. Both have specific built-in features for network use and are also ideally suited stand-alone PCs.

Video Graphics Monochrome Monitor announced

Compaq recently introduced the Video Graphics Monochrome Monitor, a VGA-compatible display ideal for text-based and graphics applications that are best suited for monochrome screens.

The new monitor features an anti-glare flat screen and a 14-inch diagonal viewing area, providing improved readability. An external reverse-video switch is standard, allowing easy switching between white characters on a black background and black characters on a white background without using software

commands.

Compatible with the industry standard Video Graphics Array (VGA), the Video Graphics Monochrome Monitor can display graphics in 640 × 480 resolution and text in 720 × 400 resolution.

The monitor also provides support for up to 64 shades of grey, non-interlaced scanning, external controls for horizontal and vertical centering, a tilt/swivel base, diagnostic self-test and a 6-foot signal cord.



Subsidiary opens in Finland

On May 18, Compaq announced the opening of Compaq Computer OY, a wholly owned subsidiary located in Helsinki, Finland.

"The establishment of a wholly owned Finnish subsidiary achieves two major objectives in our European strategy," said Zelimir Ilic, Managing Director, Europe International Division, Compaq Computer GmbH. "First, it ensures our ability to meet the growing needs of Finnish end-users, as well as the needs of our high-quality dealer network. Second, it represents a further step toward our goal of total European market coverage." Prior to the opening of the new subsidiary, Finnish dealers were supported by the Europe International Division of Compaq Computer GmbH, in Munich, West Germany.

The entire COMPAQ product line will be marketed through the Finnish Authorized COMPAQ Computer Dealer network and fully supported by Compaq Computer OY. Matti Virtanen has been named General Manager and Seppo Paunila has been appointed Sales and Marketing Manager for the new subsidiary.

The opening of the Finnish subsidiary is part of the company's continuing international expansion program, and marks the second international subsidiary opened in 1990. With the opening of Compaq Computer OY, Compaq now operates 16 wholly owned international subsidiaries located in Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, The Netherlands, Norway, Singapore, Spain, Sweden, Switzerland and the United Kingdom.

Company Earth Day activities successful

The company's Houston recycling effort held in April on Earth Day 1990 was a success.

The company collected 7,800 pounds of paper, 210 pounds of aluminum, 600 pounds of glass and half a trailer full of plastic.

This amount of material represents approximately 9.5 tons of raw materials — 66 trees, 154 million BTUs (units) of energy, 35,000 gallons of water, 251 pounds of air

pollutants, 490 pounds of water pollutants and 20 cubic yards of landfill.

Compaq also gave away 1,000 oak tree seedlings to help in the reforestation effort.

The company avoided about \$280 in landfill costs and saved that space for true trash.

"It's not only the money that matters, it's the good you're doing the environment," says Michael Jackson, Manager, Material Resources.

Charitable donations continue to grow

Each year, Compaq charitable donations grow — along with the company's commitment to uphold its civic responsibilities and help improve the quality of life.

In the U.S., Compaq donates products and cash through the company's charitable arm, the Compaq Computer Foundation, established in late 1988. However, the company has been making charitable donations almost since its beginning.

In 1987, various organizations received about 65 computers from Compaq. That amount grew to donations of almost 200 computers in 1988. This pales in comparison to the amount given in 1989 or even the amount donated so far this year.

In 1989, the Compaq Computer Foundation donated 2,000 computers and nearly \$1 million in cash to scores of different Houston-area organizations.

Major 1989 charitable donations of equipment include:

- **Houston Independent School District** — COMPAQ DESKPRO PCs used in classroom instruction.
- **Cy-Fair Independent School District** — COMPAQ DESKPROs.

- **Klein Independent School District** — COMPAQ DESKPROs.
- **Spring Independent School District** — COMPAQ DESKPROs.
- **Tomball Independent School District** — COMPAQ DESKPROs.
- **Houston READ Commission** — Computers used to start 12 learning centers throughout the Houston area to help combat illiteracy.
- **Houston Public Library** — Computers used for an on-line catalogue system.

Substantial cash contributions in 1989 went to:

- **The United Way Campaign**, which is the umbrella organization for a variety of Houston-area charities.
 - **The Stehlin Foundation for Cancer Research.**
 - **The Palmer Drug Abuse Program.**
 - **The Houston Independent School District** Character Education program.
 - **The Houston Museum of Natural Science's** new IMAX Theater to underwrite their grand opening.
- Lou Ann Champ, Corporate Contributions Administrator, says 1990 will be another banner year for

Compaq contributions.

Large 1990 charitable contributions of equipment so far include:

- **North Harris County College** — Computers used in the classrooms.
- **Houston READ Commission** — Computers used to set up eight literacy centers, including one close to the Compaq main campus.
- **Channel 8** — Computers used in the Houston public television station's annual fundraising auction.
- **FM 1960 Emergency Communication Center** — COMPAQ DESKPRO 386 PCs used in dispatching operations. The center is the dispatch headquarters for all emergency vehicles in the area surrounding the Compaq main campus.

Large 1990 cash donations made so far this year include:

- **The Northwest Assistance Ministries**, an organization which assists low-income Houstonians by operating food pantries and offering other assistance.
- **The Stehlin Foundation for Cancer Research.**
- **The Juvenile Diabetes Foundation** to fund a Houston research grant.
- **The Harris County Children's Protective Services**, an organization which assists homeless and abandoned children among other services.
- **Houston's Miller Outdoor Theater** to underwrite the production of "Annie."
- Sponsor **Fourth of July** fireworks at Willowbrook Mall, near the Compaq main campus in Houston.

Systems Engineers put it all together

The "Putting It All Together — Systems Integration" Spring '90 Systems Engineering Conference was held recently at the Houston Hotel Sofitel near the Compaq main campus.

Approximately 300 Dealer Systems Engineers and other Compaq support personnel attended the three-day conference. The goal of the conference was to increase the percentage of COMPAQ products sold into high-end installations based on recommendations of Dealer Systems Engineers.

The first SE Conference was held last October. Compaq holds two conferences per year to help dealers fulfill Compaq Support Personnel Program requirements and to provide update events for

the Compaq Specialized Dealer/LAN Manager program.

Attendees were offered a variety of breakout sessions and panel discussions with emphasis on multivendor systems integrations. A tour of the Compaq Houston facilities and dinner at the Unicorn Ranch were also included in the event.

The Unicorn Ranch is a 250-acre working ranch located about 35 miles west of Houston. It includes a miniature western town built to house the ranch's barnyard animals. Visitors can watch cowboys work the cattle or can step into the saloon, built at the turn of the century, for a cold drink while watching dinner being prepared "ranch" style.

When Compaq talks, people listen

Working at a fast-growing company such as Compaq can be exciting. Most of us are pleased to read announcements of new products, increased earnings and other corporate achievements in the press.

But with that excitement comes a danger and a responsibility. The danger? That enthusiasm about information confidential to the company or department might tempt employees to discuss sensitive issues in public, where others might hear. The responsibility? For each employee to make sure Compaq confidential information is not revealed in this way.

"Information that you tell your best friend or your spouse can very easily be misrepresented outside of the company," explains Brett Bidinger, Manager of Corporate Network Security. "In many cases, it's necessary to be careful what you say even in Compaq offices, since your information might need to remain within your work group or department."

Many of us become so involved in projects, it's difficult to take a mental break from our everyday business. As a result, conversations about Compaq are often overheard at local restaurants over lunch, in the gym locker rooms, and in the hallways and restrooms of Compaq buildings.

Compaq has made major efforts to create and sustain a secure environment within its offices all over the world. However, that security is breached each time

an employee discusses confidential information within earshot of a non-Compaq employee — whether that person is a competitor at a nearby table in a restaurant, a job applicant or a vendor at a Compaq facility.

Although Compaq has occasionally had some product information "leak" out to the press prior to announcement, disclosure of proprietary information is detrimental to the company's marketing plans and its growth.

Members of "Comseq," the Compaq information security committee, have been studying such security issues and are developing a security program that will involve all employees. They ask all employees to take the following steps before discussing work-related information in any sort of public setting.

- **Think first, speak later.** Try to imagine the worst thing that could happen if the information you're about to impart were published or broadcast to the world. Would an announcement be compromised? Would you be liable for an insider trading investigation? Could our competitors benefit? Even if you're just talking to friends and relatives, it's best to be discreet.

- **If you hear someone discussing Compaq confidential information,** find some way to ask that person to be careful. After all, if you just overheard the conversation, anyone might have been listening. And that's a chance no one at Compaq can afford to take.



Above, Compaq Systems Engineering Conference participants attended various breakout sessions.

Compaq prepares severe weather plans

Hurricane season begins this month in the U.S., and so begin the yearly preparations for a possible strike by one of the deadly storms.

The Compaq main campus in Houston is located approximately 60 miles northwest of Galveston on the upper Texas coast of the Gulf of Mexico. According to the National Oceanic and Atmospheric Administration (NOAA), hurricanes hit the Texas coast an average of once every two and a half years, bringing with them destructive storm surge, rain, wind and tornados.

Compaq has a Severe Weather Plan in place in case a hurricane makes land-fall in or near the Houston area. The purpose of this plan is to protect person-

nel from injury and minimize property damage in the event of severe weather — including hurricanes, tornados, thunderstorms, flooding, damaging hail and major freezes.

Weather service

The Corporate Loss Prevention Department in Houston is tied through computer to the Universal Weather Service, which serves North America. This service allows Compaq personnel to track storms as soon as they are reported.

According to Jeanne Lambert, Senior Loss Prevention Coordinator who tracks the storms for Compaq, tracking can begin as soon as storms are reported, many times while they are still off the

African coast. Most hurricanes which enter the Gulf of Mexico form off that coast. Lambert checks with the weather service every six hours while the storm is in the Atlantic Ocean and then every four hours when it enters the Gulf of Mexico. The weather information is bmailed to the Crisis Management Team, keeping them informed of the storm's progress.

Crisis Management Team

Usually 48 hours before the hurricane reaches land, the Crisis Management Team begins to meet and make decisions. The team is made up of representatives of the Facilities, Employee Relations, Corporate Communications, Risk Management, Information Management Services, Corporate Manufacturing and Corporate Loss Prevention departments.

The team provides senior management with updates of severe weather and ensures the necessary precautions have been taken to protect Compaq property.

Also, the team is in charge of recommending to senior management a company shutdown if it's warranted.

"We make recommendations and senior management makes the decisions," says Paul Wedyck, Senior Corporate Loss Prevention Representative, who is on the Crisis Management Team.

If a decision is made to close Houston operations, the team attempts to notify local news stations two hours

before any shift begins.

As a storm approaches the Houston area, an emergency command center is established and Corporate Loss Prevention personnel staff it around the clock. They stay in contact with Universal Weather Service, the Sheriff's Department, Cypress Creek Fire Department and other public agencies until the storm is over.

Other conditions

Many other severe weather conditions warrant close monitoring. Corporate Loss Prevention personnel are also in contact with the Houston Metropolitan Flood Control District and the Sheriff's Department to gather information about flash flooding, street flooding and other conditions which can affect employees' safety getting to or leaving work.

Sometimes, Wedyck says, Compaq will be informed by public agencies that the immediate area surrounding the main campus is clear of flooding or freezing streets and employees who live near the campus can drive safely to work. But, he says, that does not mean that other Houston streets are free of danger. Employees must use common sense when deciding whether or not to drive to work during severe weather.

If in doubt, Wedyck recommends listening to local radio stations to obtain information on the severe weather conditions before driving to work.



Jeanne Lambert, Senior Loss Prevention Coordinator, demonstrates how a hurricane is tracked.

Quality team scores cycle-time success

Compaq is dedicated to becoming a World Class Corporation, one in which each employee is committed to customer satisfaction. Already, employees have taken this principle to heart, by forming Total Quality Commitment (TQC) teams to evaluate their work, identify improvements and implement solutions that will satisfy customers.

TQC teams are popping up throughout the company in some of the most unlikely places. Their improvements demonstrate the success of the Total Quality Commitment process. Inside & Out will be updating employees on quality information and issues company-wide — including TQC team success stories such as the one that follows.

Members of the Corporate Traffic Department, which manages the ways in which products are shipped to and from Compaq domestically and internationally, knew there had to be an easier way to comply with government regulations on updating international export information. The department suspected that the way it informed Compaq international subsidiaries of export changes took too much time.

"Regulation of companies such as Compaq that hold export distribution licenses is pretty strict," explains Jerry Gerron, Domestic Traffic Manager and co-facilitator of the department's Total Quality Commitment team. "But it's necessary to follow regulations precisely."

The company's export distribution license enables Compaq to export

finished products to its international subsidiaries without having to obtain prior government permission for each shipment. To qualify, an exporter has to set up and maintain controls required by the U.S. Department of Commerce.

"It's very important that Compaq not lose its export distribution privilege," Gerron explains. "The loss would entail having to request an individual license in order to ship products to one of our international subsidiaries."

Among requirements for maintaining this license is the stipulation that all Compaq international subsidiaries and distributors maintain updated lists of individuals and companies denied receipt of controlled American-made goods. This information is kept on a "Table of Denial Orders" (TDO), which is updated periodically in the Federal Register. Compaq is responsible for sending its subsidiaries timely updates to the TDO, and receiving confirmation of receipt from each subsidiary.

Timely updates

"Our team believed that the process of getting the information to subsidiaries and receiving confirmation from them was taking too long," says Gerron. "From the date the TDO updates were published in the Federal Register to the date foreign designees responded to the list was typically 40 days."

In addition, because the attorney retained by Compaq in Washington would mail photocopies of the Register to Compaq, the quality of those copies was inconsistent. Updates were also complicated by legal jargon.

Compaq Traffic Department employees prepared a transmittal letter to 21 recipients of this information, made 21 copies and mailed them to the consignees. If no response was received within two weeks, they would have to follow up, which lengthened the process considerably.

Early this year, the Traffic Department's TQC team decided to focus on improving the TDO update process and shortening the cycle time. They approached the problem as a team, to determine how the process could be changed.

Electronic extracts

"Jill Gish, one of our team members, discovered an electronic service that provides timely extracts from the TDO each time changes are made," says Gerron. "One day after these updates appear on the Federal Register, they're available in concise form on an electronic data base to subscribers."

The team developed a Banyan mail address book to all international subsidiaries that require the updated TDO information. Then, each time the information is published, it can be downloaded into a bmail attachment and sent out immediately. These bmail messages are certified, so Traffic is notified when each subsidiary receives the message. This notification satisfies government requirements for proof of receipt.

For the offices not on the bmail network, Traffic uses the Local Area Network Fax system (LANFAX). A bmail message is sent to the corporate fax room, where the information can then

be faxed to these destinations. Traffic requires these subsidiaries to confirm by fax that they received the TDO update.

As a result of this new method, cycle time on sending and receiving confirmation of these updates has been cut drastically — from 40 days to about four.

"In addition, we have cut out about 20 hours of labor in preparing and copying these TDOs for distribution," notes Gerron. "And our customers — the subsidiaries — are much happier, since they now receive an easy-to-read copy of condensed information typed on their systems. No more copies of copies of copies. And with the timeliness of this method, there's practically no opportunity for Compaq to ship to a company that's listed on the Denial Orders table."

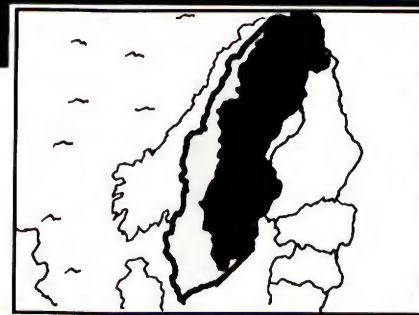
Customer satisfaction

The new process has been in operation since the beginning of March — receiving rave reviews.

"The process has satisfied not just our final customers, but also our own people," says Gerron. "We've reduced our workload, our customers' workload and our legal fees. And we've saved quite a bit of money on copier supplies and shipping fees."

In fact, the TQC team approach to problem-solving has been so successful for this Compaq department, that they're busily preparing a presentation to another "customer" — the Compaq Purchasing Department.

"This project really pulled the team together," claims Gerron. "To put in all this work and see such a fine result did wonders for our morale."



Compaq Sweden on a steady course

Compaq Computer Corporation is definitely well-known in Sweden. Although located far north of the Compaq Houston headquarters, this Nordic country bordering Norway, the Baltic Sea and the Gulf of Bothnia hosts one of the company's most successful subsidiaries.

Since its beginning in October of 1987, CCS Deskpro Computer AB of Stockholm, Sweden, the seventh international subsidiary, has demonstrated Compaq style. On hand to introduce the new Compaq subsidiary in Sweden were Rod Canion, Compaq President, and Larry Hagman, the actor who plays "J.R. Ewing" on the U.S. television series *Dallas*. Following a press conference and a dinner at the Town Hall (where the Nobel Prize dinner is held each year) the fledgling company quickly settled down to business.

Since that time, Compaq Sweden has rapidly grown to become one of the most important players in the Swedish personal computer market. And the compa-

Swedish kronor (nearly \$15.5 million U.S.). In 1989, this figure increased 119 percent to 222 million kronor.

Considering the relatively late start of the company in Sweden, and the comparatively small size of the Swedish market, this growth rate is truly remarkable. Today, Compaq has between 5 and 6 percent of the market share in Sweden, a percentage that is growing steadily. This is all the more impressive in a market that boasts all the international suppliers as well as such local competitors as Victor and Nokia.

On the road

One reason for the rapid acceptance of Compaq in Sweden is employee mobility. Following the product announcements last November, presentations were made in four Swedish cities: Stockholm, Gothenburg, Malmoe and Sundsvall. These presentations gave Compaq Sweden employees the chance to get out in the country and inform dealers, customers and prospects of the latest Compaq



Larry Hagman joined Eckhard Pfeiffer, Compaq President, Europe and International, at the opening of the Compaq Sweden subsidiary in 1987.

A special feeling

To many Compaq Sweden employees who have witnessed the subsidiary's phenomenal growth over the past two years, the company's success is not surprising. Niklas Jonsson, formerly with Support and now with the Marketing Department in Compaq Sweden, says "We know that we are working with the strongest product on the market. That gives us a special feeling and makes us different."

A Compaq Sweden employee since early 1988, Jonsson notes that the subsidiary has come a long way from the days when the entire office staff could sit around a table in the morning to discuss the day's events.

"The expansion is very exciting," he reports. "I think we have managed to keep the charm of a small company, even though the organization is rather large today. The cooperation and enthusiasm among the staff is fantastic."

As the subsidiary has grown, so has the Swedish dealer network. Today, the dealer network in Sweden has 75 outlets all over the country. Compaq maintains a close relationship with its dealers — an important factor in this impressive growth rate.

Large accounts

Many Swedish companies have made the decision to buy COMPAQ products

and made large investments in COMPAQ personal computers. These large accounts have become an important target market for the sales people of Compaq Sweden.

As many dealers target large accounts, they find that a relationship with Compaq contributes to their success. Last year, COMPAQ products were chosen by numerous large Swedish organizations, which made 1989 a breakthrough year for the company.

In the Swedish personal computer market, the acceptance and need for advanced technology is strong. In particular, the market for laptop computers in Sweden is very large — and Compaq laptop computers are the acknowledged favorites. In fact, the COMPAQ SLT/286 is the best-selling COMPAQ product in Sweden.

COMPAQ PCs are considered "computers of preference" by many. Comparisons between different manufacturers usually include a COMPAQ PC, because the Compaq name has come to represent technology leadership in the Swedish market. Acceptance for such new products as the COMPAQ SYSTEMPRO is very high.

These factors indicate substantial growth potential for Compaq Sweden. But the subsidiary plans to maintain that growth while preserving the Compaq spirit that attracts Niklas Jonsson and other Compaq Sweden employees.

COUNTRY PROFILE	
Country:	Sweden
Population:	8.3 million
Major cities:	Stockholm, Gothenburg, Malmoe, Uppsala
SUBSIDIARY PROFILE	
Name:	Compaq Computer AB
Head office:	Norgegatan 2, Box 1224, S-164 28 Kista, Sweden
Location:	15 kilometers north of Stockholm
Phone:	011-46-8-703-5200
Fax:	011-46-8-751-2057
Established:	October, 1987
No. of employees:	35
No. of dealers:	75

ny's expansion has continued — Compaq Sweden is growing faster than the market as a whole.

New offices

In just over two years, the Compaq Sweden staff has grown to include 35 people — and it's still growing. The company recently outgrew its original office space and moved to new, more spacious offices. The new office has ample space for ongoing expansion.

Compaq Sweden is located in Kista, an area 15 kilometers (a little more than 10 miles) from the heart of Stockholm and often described as the "Silicon Valley of Sweden." Many computer companies have offices here, and the area is expanding rapidly with new businesses.

That market growth is reflected in Compaq Sweden's financial performance. Since the subsidiary's start-up in late 1987, sales have increased to 222 million Swedish kronor (about \$34 million U.S.). In 1988, its first full fiscal year, the subsidiary reached sales of 101 million

products and developments. Hundreds of Swedes took the opportunity to learn more about Compaq.

Compaq Sweden often uses product launches to create awareness. At these local events, dealers and customers gather to view new products and learn more about Compaq. Frequent press conferences ensure that Swedish journalists recognize Compaq, its products, and the people behind them. The journalists, in turn, have responded with phenomenal press coverage.

Another activity that has generated a great deal of interest in Compaq is the demonstration center in the Stockholm airport (profiled in the April issue of *Inside & Out*). The display enables dealers to present themselves and COMPAQ products to business people traveling into and out of Sweden. Covering 100 square meters in total area and featuring display cubes containing COMPAQ PCs and walls of Compaq posters, the demonstration center makes it difficult for travelers to miss Compaq Sweden.



Compaq Sweden invited Authorized Dealers, customers and journalists to celebrate the announcement of new COMPAQ products on board the "Dixie Queen."

French dealers visit Compaq Scotland

Why would employees of the largest microcomputer reseller in France go to Scotland? To learn more about Compaq, of course.

That's exactly what happened the weekend of March 30 when more than 1,000 employees of Agena, France's largest PC dealer, joined 42 people from Compaq France on a tour of the

Compaq Scotland facility in Erskine.

Thomas Lot, in charge of Dealer Marketing, notes that Compaq France organized the Agena visit to increase awareness of Compaq and market share of COMPAQ products within Agena, which has traditionally been more oriented toward Compaq competitors. In addition, he notes that Compaq France hoped to

support Agena's perception of Compaq as a key supplier.

The dealer was already interested in Compaq. From year to year, Compaq has been gaining market share within Agena, rising from 15 percent of units sold in 1988 to more than 23 percent in 1989.

On the first day of the two-day visit, Agena employees toured the plant, visited a nearby whisky distillery and then split up into small groups for lunch at a variety of Scottish restaurants. In the afternoon, they attended a conference hosted by Compaq and Agena at the Scottish Exhibition and Conference Centre in Glasgow. Eckhard Pfeiffer, President, Europe and International, joined Compaq France Managing Director Bernard Maniglier and Compaq Scotland Managing Director John Dolan in relating the Compaq story to the group.

Later, Agena employees joined Compaq Scotland employees for dinner and dancing aboard the "Tuxedo Princess," a large boat moored on the River Clyde at Glasgow.

The next morning, Agena employees were given the opportunity to participate in or observe a rugby match between Agena and Compaq. The final score was Agena 30, Compaq 3.

Participants and observers were

entertained by cheerleaders, a traditional bagpipe band and several international rugby stars who attended the match.

Agena employees spent the remainder of the day shopping, sightseeing or participating in a variety of organized sporting events. On Saturday evening, they were invited to attend a dinner dance hosted by Compaq France.

The visit was an unqualified success. "We received very positive comments from Agena people," notes Gabriel Christophel, Regional Sales Manager in charge of Agena. "This indicates that the trip significantly contributed to improving our relationship with Agena."

Participants commented on the professionalism and expertise they had witnessed at Compaq Scotland. They also appreciated the fact that *all* Agena employees were invited.

One participant noted, "We now have a better idea of the size of your company, and will be able to tell our customers more about Compaq and its products."

In France, the Compaq slogan is "Compaq à suivre," which means "Compaq to be followed and to be continued." On one evaluation form, an Agena employee had simply written "Agena convention, à suivre" — a sure sign that the trip to Scotland will not soon be forgotten by this reseller.



Agena employees were greeted by a traditional bagpipe band on their recent visit to Compaq Scotland.

Company wins award

Not only did Compaq win the National Association of Investors Corporation's 1989 Growth Company of the Year Award, but it also knocked out all competition for second and third places.

To be entered in the annual contest, a company must be nominated by an NAIC member. Compaq received three nominations, which is very unusual, according to NAIC President Kenneth S. Janke. Therefore, the organization did not award a second or third place, but gave each of the three Compaq-nominating members a first-prize check for \$100.

The members who nominated Compaq were Dana Reinhart, Steilacoom, Wash., Elizabeth L. Spooner, Houston, and William C. Thomas, Center Point, Texas.

Compaq was announced as the winner in the March 1990 issue of *Better Investing Magazine*. The Dress Barn was named runner-up. Daryl White, Senior Vice President, Finance and Chief Financial Officer, accepted the award.

In her nomination letter, Spooner wrote, "We in Houston are extremely proud of Compaq Computer Corporation ... I believe it deserves the highest honors and awards for the courage of its founders to start a venture, the innovation of a superb idea, the ability to build that idea into a billion dollar company and the dedication to excellence of its management and staff."

HELPING HANDS



Over 200 volunteers from Compaq recently joined others from around the Houston area to paint and repair houses of low-income homeowners in a program sponsored by the Houston Committee for Private Sector Initiatives. Eleven Compaq crews participated in offering the free service to needy Houstonians. They worked on six homes in inner-city Houston. Highest priority in home-repair selection is given to low- or limited-income homeowners who are older than 60 or physically handicapped.

COMPAQ

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